

Access DB# 71581**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: Jonathan Crepeau Examiner #: 75637 Date: 10/4/02  
 Art Unit: 1746 Phone Number 301 5051 Serial Number: 04/994903  
 Mail Box and Bldg/Room Location: CP3 B001 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: ELECTRODE AND INTERCONNECT FOR MINIATURE FUEL CELLS USING  
DIRECT METHANE FEED  
 Inventors (please provide full names): Selvarajugan R. Narayanan,  
Thomas I. Valdez, Filipeiro Clara  
 Earliest Priority Filing Date: 11/27/00

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

A FUEL CELL HAVING AN INTERCONNECT (SEPARATOR) STRUCTURE IN WHICH THE AREA OF THE INTERCONNECT IS MUCH SMALLER <sup>(~20%)</sup> THAN THE AREA OF THE ADJOINING ELECTRODE. ANY RECOGNITION OF THESE RELATIVE SIZES OR RATIOS BY THE PRIOR ART WOULD BE HELPFUL.

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 Date Searcher Picked Up: \_\_\_\_\_  
 Date Completed: 10-10-02  
 Searcher Prep & Review Time: 5  
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 Online Time: 85

## Type of Search

NA Sequence (#) \_\_\_\_\_  
 AA Sequence (#) \_\_\_\_\_  
 Structure (#) \_\_\_\_\_  
 Bibliographic ☒ \_\_\_\_\_  
 Litigation \_\_\_\_\_  
 Fulltext \_\_\_\_\_  
 Patent Family \_\_\_\_\_  
 Other \_\_\_\_\_

## Vendors and cost where applicable

STN \$ 263.49  
 Dialog \_\_\_\_\_  
 Questel/Orbit \_\_\_\_\_  
 Dr.Link \_\_\_\_\_  
 Lexis/Nexis \_\_\_\_\_  
 Sequence Systems \_\_\_\_\_  
 WWW/Internet \_\_\_\_\_  
 Other (specify) \_\_\_\_\_

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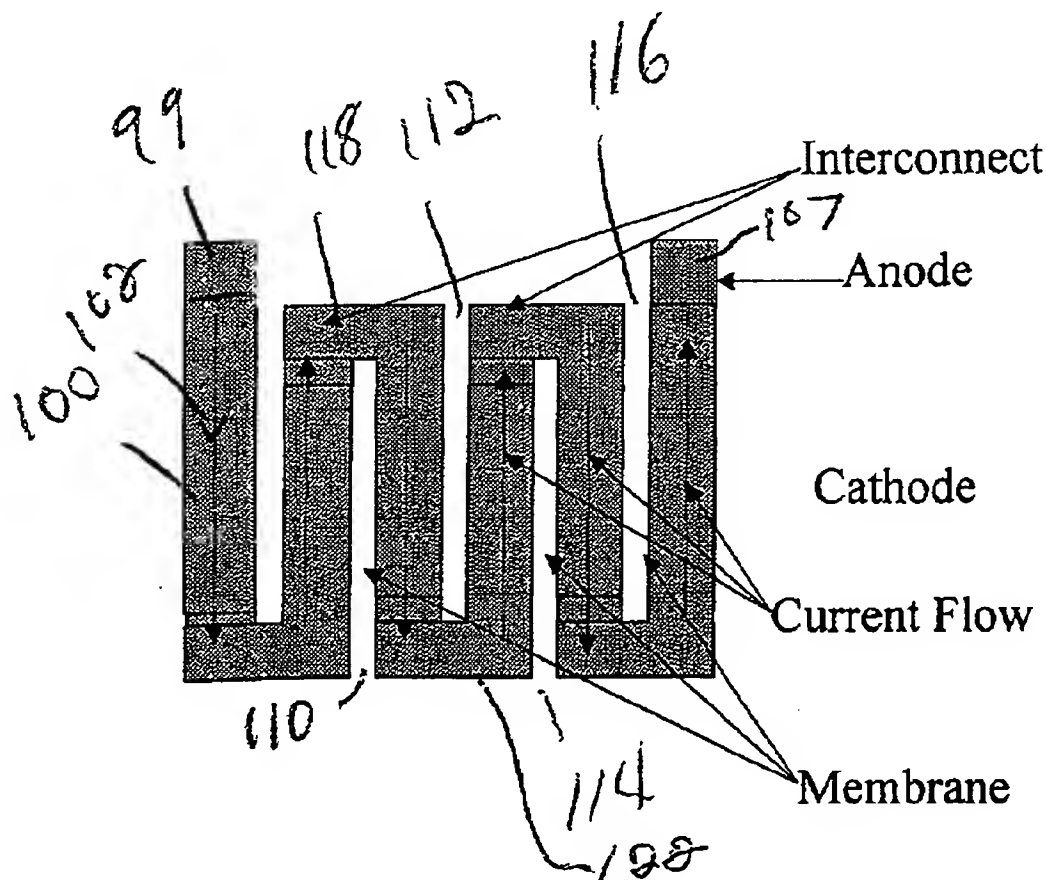
US 20020102449A1

(19) **United States**(12) **Patent Application Publication**  
Narayanan et al.(10) Pub. No.: **US 2002/0102449 A1**(43) Pub. Date: **Aug. 1, 2002**(54) **ELECTRODE AND INTERCONNECT FOR  
MINIATURE FUEL CELLS USING DIRECT  
METHANOL FEED**(60) Provisional application No. 60/253,423, filed on Nov.  
27, 2000.**Publication Classification**(76) Inventors: **Sekharipuram R. Narayanan**, Arcadia,  
CA (US); **Thomas I. Valdez**, Covina,  
CA (US); **Filiberto Clara**, Prosser, WA  
(US)(51) Int. Cl.<sup>7</sup> ..... **H01M 8/10; B05D 5/12;****H01M 8/24**(52) U.S. Cl. .... **429/32; 429/34; 427/115**

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**SAN DIEGO, CA 92122 (US)**(57) **ABSTRACT**

An improved system for interconnects in a fuel cell. In one embodiment, the membranes are located in parallel with one another, and current flow between them is facilitated by interconnects. In another embodiment, all of the current flow is through the interconnects which are located on the membranes. The interconnects are located between two electrodes.

(21) Appl. No.: **09/994,907**(22) Filed: **Nov. 26, 2001**

	Type	Hits	Search Text	DBs
29	BRS	67	429/30-44.ccls. and (catalyst with coating with membrane)	USPAT
30	BRS	127	429/30-44.ccls. and (catalyst with coat\$4 with membrane)	USPAT
31	BRS	127	(429/30-44.ccls. and (catalyst with coat\$4 with membrane)) and (@ad<=20001127 or @rlad<=20001127 or @pd<=20001127)	USPAT
32	BRS	15	429/30-44.ccls. and (catalyst with coat\$4 with membrane with (good or larg\$4 or high or increas\$4))	USPAT
33	BRS	13	429/30-44.ccls. and (catalyst with coat\$4 with membrane with (decreas\$4 or low\$4))	USPAT
34	BRS	88	(429/30-44.ccls. and (catalyst with coat\$4 with membrane)) and (@pd<=20001127)	USPAT

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